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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/785,412	02/25/2004	Kazunori Yamauchi	046124-5275	8361

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EXAMINER

LYONS, MICHAEL A

ART UNIT PAPER NUMBER

2877

DATE MAILED: 06/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/785,412

Applicant(s)

YAMAUCHI, KAZUNORI

Examiner

Michael A. Lyons

Art Unit

2877

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(e). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 October 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 10 is/are rejected.
- 7) ☒ Claim(s) 7-9 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 October 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 102704
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Drawings

Figures 17-18 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

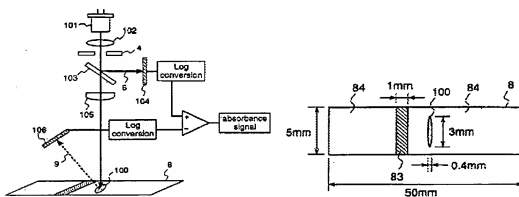
The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: color line CL as found, for example, on page 16 of the specification. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2 and 4-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyoshi et al (EP1249696) in view of Liljestrand et al (6,200,531).



Regarding claim 1, Miyoshi (Figs. 1 and 2) discloses a measuring device for an immunochromatography test piece comprising an irradiation optical system comprising a semiconductor light emitting element 101 that is placed so that light irradiated as the measurement light is substantially normal to test piece 8, and a detection optical system that comprises a photodiode 106 provided at an obliquely upward position above a color line 83 and so placed so that the diode detects light obliquely upward reflected from the test piece.

Miyoshi only discloses a photodiode, however, and not a semiconductor photodetector as claimed, and doesn't explicitly disclose the detector being substantially parallel to the colored line.

Liljestrand teaches in a device that performs chromatographic measurements the use of a light detector 122 that is a semiconductor photodetector (Col. 10, lines 37-42).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use a semiconductor photodetector for the photodiode of Miyoshi as per Liljestrand, the motivation being that the semiconductor photodetector can continue providing accurate signals under adverse conditions, such as high temperature or a magnetic field (Col. 10, lines 37-42 of Liljestrand).

Further, it would have been obvious to one having ordinary skill in the art at the time the invention was made to ensure the photodetector was substantially parallel to the colored line on the test piece, since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70.

As for claim 2, Miyoshi discloses slit 4 as a beam shaping member and cylindrical lens 105 to focus the beam onto the test piece.

Regarding claim 4, Miyoshi (Figs. 1 and 2) discloses a measuring device for an immunochromatography test piece comprising an irradiation optical system comprising a semiconductor light emitting element 101 that is placed so that light irradiated as the measurement light is substantially normal to test piece 8, and a detection optical system that comprises a photodiode 106 provided at an obliquely upward position above a color line 83 and so placed so that the diode detects light obliquely upward reflected from the test piece. Miyoshi also discloses a pedestal 312 that is a measurement table on which fixing table 311 which holds the test piece 8 can be placed, with the measurement table constructed so that it can be scanned (paragraphs 316-317), so that the irradiation optical system and the direction optical system

move relative to the pedestal in a predetermined scan direction (if the pedestal moves and the rest of the elements remain stationary, relative movement is achieved).

Miyoshi only discloses a photodiode, however, and not a semiconductor photodetector as claimed, and doesn't explicitly disclose the detector being substantially parallel to the colored line.

Liljestrand teaches in a device that performs chromatographic measurements the use of a light detector 122 that is a semiconductor photodetector (Col. 10, lines 37-42).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use a semiconductor photodetector for the photodiode of Miyoshi as per Liljestrand, the motivation being that the semiconductor photodetector can continue providing accurate signals under adverse conditions, such as high temperature or a magnetic field (Col. 10, lines 37-42 of Liljestrand).

Further, it would have been obvious to one having ordinary skill in the art at the time the invention was made to ensure the photodetector was substantially parallel to the colored line on the test piece, since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70.

As for claim 5, Miyoshi discloses slit 4 as a beam shaping member and cylindrical lens 105 to focus the beam onto the test piece.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Miyoshi and Liljestrand as applied to claim 1 above, and further in view of Matsunaka et al (JP 11-083745).

As for claim 3, Miyoshi further discloses (Fig. 17) a pedestal 312 that is a measurement table on which fixing table 311 which holds the test piece 8 can be placed, with the measurement table constructed so that it can be scanned (paragraphs 316-317). Miyoshi fails to disclose an explicit optical head on which the irradiation optical system and the detection optical system are mounted.

Matsunaka (Fig. 3) teaches an optical measurement device where the irradiating and detection systems 17 and 18 are placed in an optical head 16.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to place the irradiation and detection system of the combined device in an optical head arrangement as per Matsunaka, the motivation being that the optical head will enable the light source and detector to be protected from environmental fluctuations that may adversely affect the measurements while making the system more compact.

Claims 6 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyoshi and Liljestrand as applied to claim 4 above, and further in view of Matsunaka et al (JP 11-083745) and in further view of Sasaki (JP 61-2669043).

As for claim 6, the combined device discloses the claimed invention except for the optical head, the scanning mechanism, and the chassis.

Matsunaka teaches an optical measurement device where the irradiating and detection systems 17 and 18 are placed in an optical head 16. Further, Sasaki (Figs. 1a – 1c) teaches a chromatographic scanner where an optical head for multiple measuring modes (4, 10, 12) can be provided on the same movable base stand 2 along with a necessary drive mechanism 6.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to place the irradiation and detection system of the combined device on a scannable optical head as per Matsunaka and Sasaki, the motivation being that the optical head will enable the light source and detector to be protected from environmental fluctuations that may adversely affect the measurements while making the system more compact, while scanning the optical head rather than the specimen will prevent contamination of the specimen due to unnecessary fluctuation while enabling measurement of the entire specimen.

As for claim 10, the combined device discloses the claimed invention except for where the pedestal is detachably attached to the chassis. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make the pedestal be detachable from the chassis, the motivation being that it will allow for the easy exchange of samples to be measured, and also since it has been held that constructing a formerly integral structure in various elements involves only routine skill in the art. *Nerwin v. Erlichman*, 168 USPQ 177, 179.

Allowable Subject Matter

Claims 7-9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

As for claim 7, the prior art of record, taken either alone or in combination, fails to disclose or render obvious the exact claimed arrangement of the chassis featuring a pair of vertical wall portions on both sides of the pedestal and the scanning mechanism featuring a slider

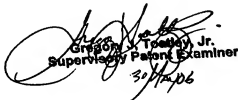
block on which the optical head is fixed, with a pair of guide rails that guide the slider block in the predetermined scan direction, with a drive motor for moving the slider block, with the guide rails fixed to a top portion coupled to the vertical walls and the optical head scanning in a space surrounded by the pair of vertical walls and the top portion, in combination with the rest of the limitations of the above claim.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael A. Lyons whose telephone number is 571-272-2420. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory J. Toatley can be reached on 571-272-2800 ext. 77. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MAL
May 25, 2006


Gregory J. Toatley Jr.
Supervisor
3/17/06